

<u>Figure 1</u>: Addition of MgO (5 vol%) in a ceramic matrix: $La_{0.5}Sr_{0.5}Fe_{0.9}Ti_{0.1}O_{3-\delta}$ sintered in nitrogen at 1150°C for 1.5 h (magnifications: x8000 for the left-hand image and x10 000 for the right-hand image).

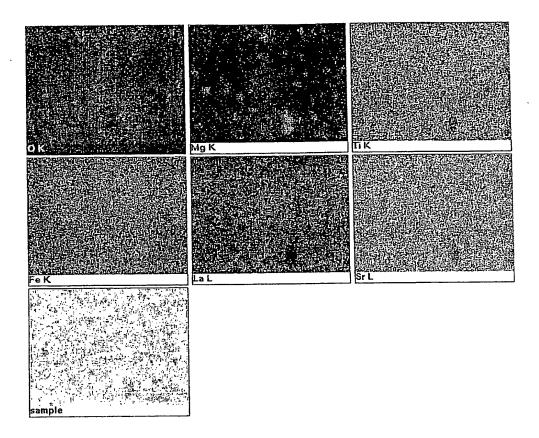


Figure 2: Maps for the elements Mg, Sr, La, Fe and Ti in the ceramic matrix after sintering in nitrogen at 1150°C for 1.5 h.

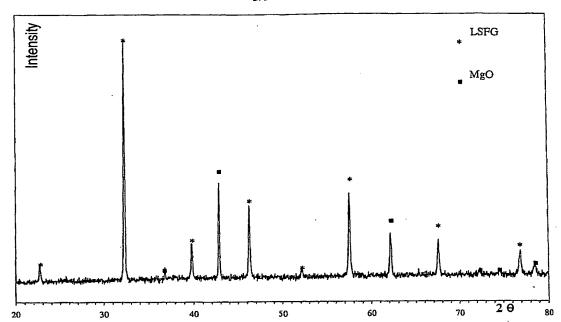
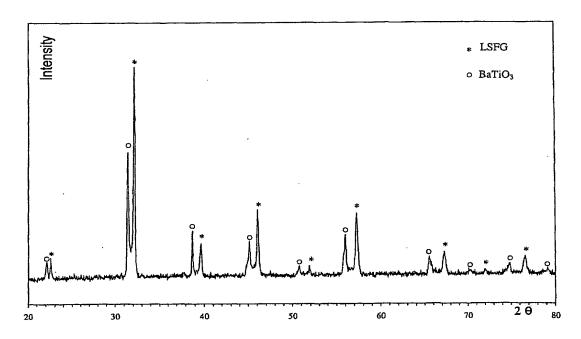


Figure 3: X-ray diffraction diagram of the LSFG/MgO composite; the two phases coexist and no secondary phase appears.



<u>Figure 4: Diffraction diagram of an LSFG/BaTiO₃</u> composite; the two phases coexist and no secondary phase appears.

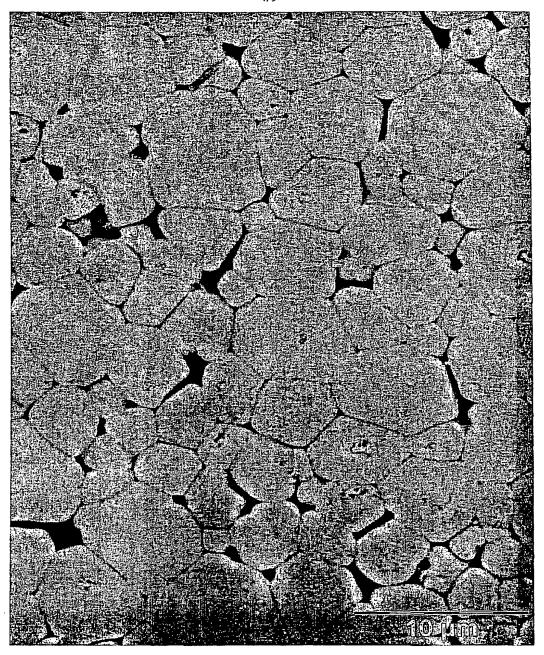


Figure 5

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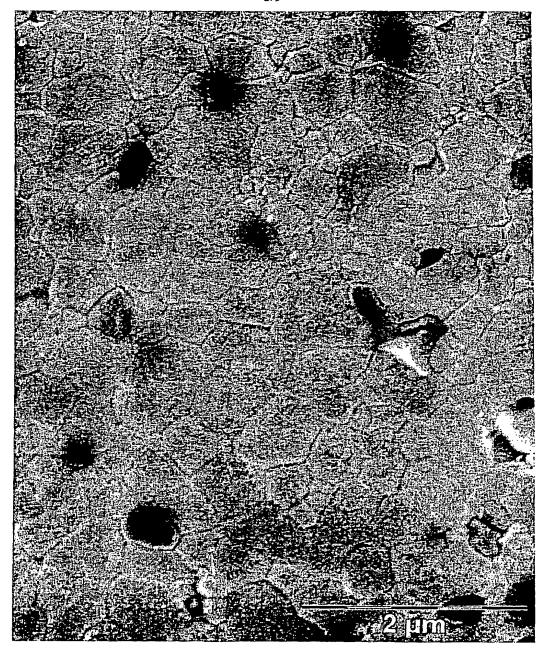


Figure 6

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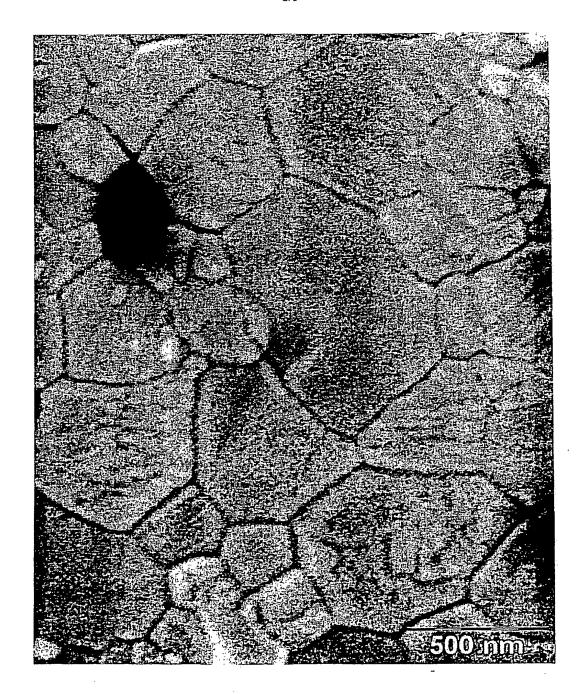


Figure 7

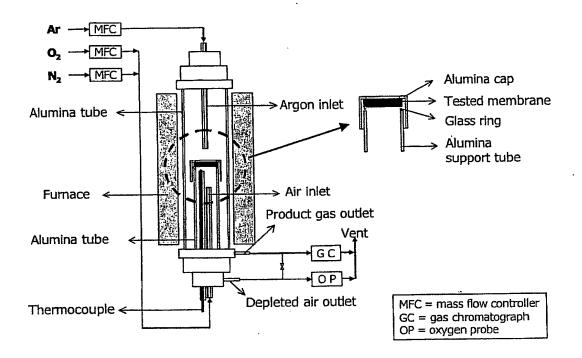


Figure 8

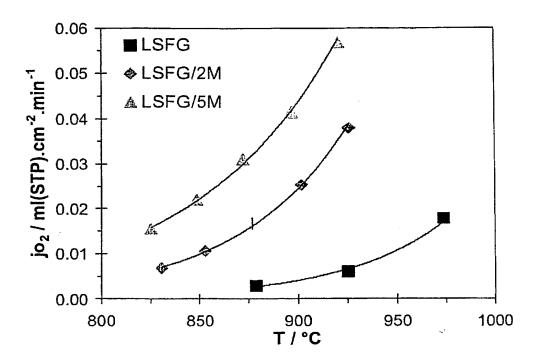


Figure 9

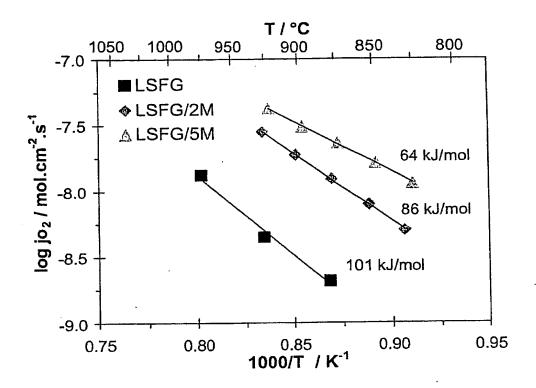


Figure 10